E-Start Turbo
AWESOME R/C PRODUCTS
By Model Engines
High torque electric starter system for cars & buggies
Makes starting engines easy!
• Powerful 750 size starter motor
• Adapters included for XTM, SH, GO, Mach and Force engines.
• Bearing supported, super worm drive for the ultimate starting torque.
• Hex starter shaft fits other popular starter systems.
• Uses readily available 7.2v battery packs (not included).

USER'S GUIDE

CUSTOMER SERVICE INFORMATION

Model Engines (Aust.) Pty. Ltd
P.O Box 828, Noble Park, VIC., Australia, 3174
www.modelengines.com.au

CE

Made in Taiwan

WARNINGS - PLEASE READ AND UNDERSTAND BEFORE USE

- Never use any fuel in your engine other than glow fuels specifically designed for use in model car engines. Use of any other types of fuel can cause severe damage to your engine and/or personal injury. **NEVER use gasoline/petrol or diesel fuel!**
- Glow fuel engines emit exhaust vapours that are poisonous and can be dangerous to your health. It is important that you operate your engine in a very well-ventilated area.
- Before starting your engine, make sure that the throttle trim is set to the idle position. Starting your engine at any setting above idle can cause the model to lurch out of your hands.
- Do not run the E-Start Electric Starter for more than 10 seconds at a time. Continuously running the Sure Start Electric Starter for more than 10 seconds at a time can cause the electric motor to overheat and possibly result in damaging the motor.
- If at any time the engine refuses to turn over - **STOP!** Do not force it. Do not continue to attempt to start the engine or damage to the engine could occur.

THE E-START TURBO ELECTRIC START SYSTEM WORKS WITH PULL STARTENGINES ONLY!

CONTENTS / ACCESSORIES REQUIRED / REPLACEMENT PARTS LIST

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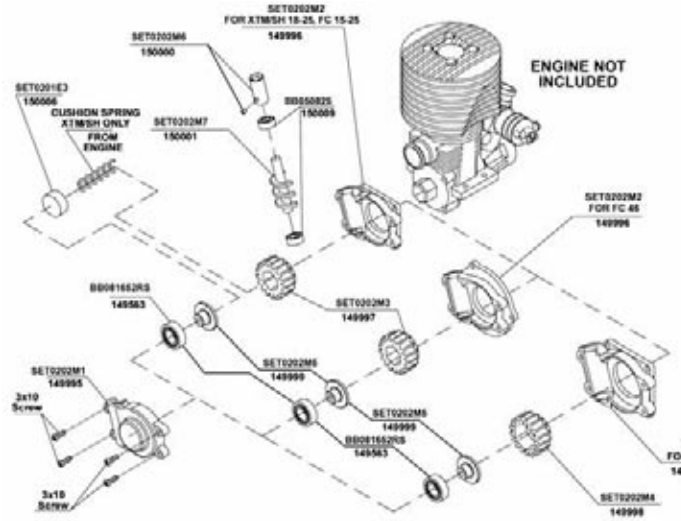
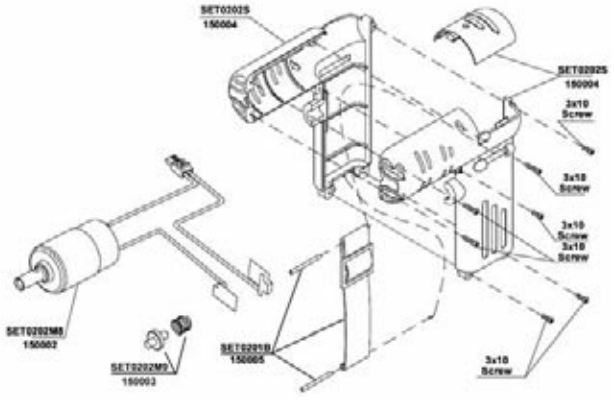
6 Cell, 7.2V Stick Pack

4~7 Cell Battery Charger

PARTS BLOW-UP AND REPLACEMENT PARTS LIST





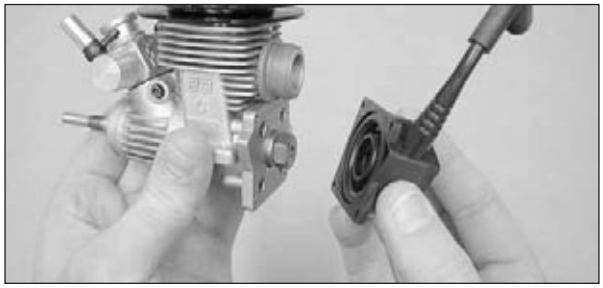
149563	BB081652RS	Ball Bearing 8x16x5mm for Main Gear Stopper
149995	SET0202M1	Housing Cover
149996	SET0202M2	Housing (FC, SH/XTM & O.S.)
149997	SET0202M3	Main Gear - 16T 12mm for FC & SH/XTM
149998	SET0202M4	Main Gear 16T 14.2mm for O.S.
149999	SET0202M5	Main Gear Stopper (Steel)
150000	SET0202M6	Shaft Couplers with Grub Screws (2)
150001	SET0202M7	Pinion Gear (Rotary Gear)
150002	SET0202M8	Electric Motor
150003	SET0202M9	On/Off Trigger Switch and Spring
150004	SET0202S	Case Parts
150005	SET0201B	Strap with Mounting Pins
150006	SET0201E3	Spring Mount for SH & XTM Engines
150007	SET0201M3	Starter Shaft w/O-Ring (L=150mm) - Not Pictured
150009	BB050825	Ball Bearing 5x8x2.5mm for Pinion Gear

INSTALLING THE E - START STARTER HOUSING ONTO YOUR ENGINE

TOOLS REQUIRED (NOT INCLUDED)

 # 2 Phillips Head Screwdriver

2mm Hex Wrench

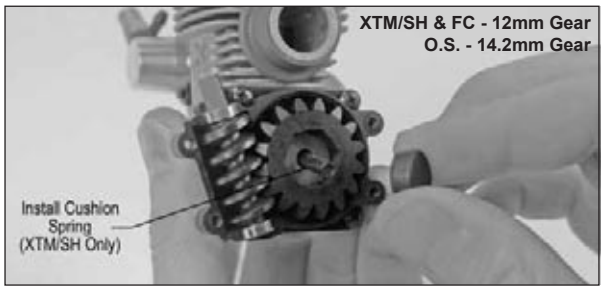


- ❑ Remove the pull-start assembly and cushion spring from your engine, making sure you leave the one-way bearing in place. Put the pull-start mounting screws to one side as they will be re-used later.

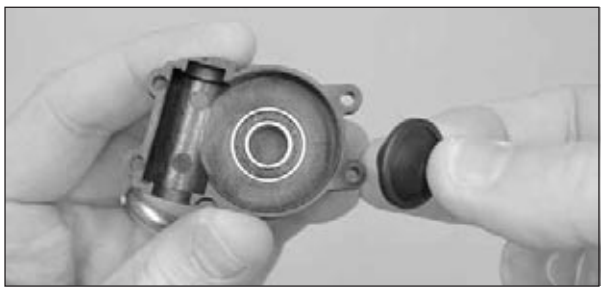
- ❑ Install the E - Start starter housing onto your engine, using the pull-start mounting screws you removed previously.

IMPORTANT Three different housings are included for different engines. Make sure that you use the one designed for your particular engine. Engine type labels are on the packaging and also moulded into the inside surface of each housing.

IMPORTANT Two main gears are included - one for O.S. engines and one for XTM Racing, SH or Force engines. As with the starter housings, make sure you install the correct main gear onto your engine in the next procedure.



- ❑ Install one ball bearing onto each end of the pinion gear, then press the pinion gear assembly into the starter housing.
- ❑ Push the main gear firmly over the one-way bearing or starter shaft, making sure that the flat side of the main gear is facing towards you.
- ❑ If you're using an XTM Racing or SH engine, insert the cushion spring and the plastic spring mount, as shown.



- ❑ Press the sealed ball bearing into the back of the starter housing cover, then push the main gear stopper over the ball bearing.

- ❑ Place the starter housing cover assembly onto the starter housing while carefully compressing the cushion spring (if used). Secure the starter housing in place using the four self-tapping screws provided.
- ❑ Install the shaft coupler onto the end of the pinion gear shaft and secure it into place, using the grub screw provided.

IMPORTANT Make sure you tighten the grub screw against the flat spot on the pinion gear shaft and use Lock-Tite to secure it in place.

USING THE E - START ELECTRIC STARTER SYSTEM

❑ Remove the battery cover from the back of the E - Start Electric Starter.

❑ Slide a fully charged 6 cell, 7.2V battery pack into the handle, connect the two plastic plugs together, then reinstall the battery cover.

❑ Firmly push the end of the starter shaft into the shaft coupler on the E - Start Electric Starter. The O-Ring that's pre-installed on the starter shaft will lock the starter shaft firmly into place.

WARNING!! PLEASE READ THIS BEFORE STARTING YOUR ENGINE!!

If at any time the engine refuses to turn over - **STOP!** The engine has become flooded and the excess fuel **must be removed from the engine** or damage to the E - Start Electric Starter System and/or the engine could occur. To remove the excess fuel from the engine, follow the procedure listed below:

- Completely close the high speed needle valve (noting how many turns out it is) until it bottoms out. Do this gently. Don't force it!
- Remove the glow plug from the cylinder head.
- With a rag over the top of the engine, engage the E - Start Electric Starter for a few seconds to expel the excess fuel from the engine.
- Check to make sure that the glow plug has not been fouled, then reinstall it.
- Reset the high speed needle valve.

❑ Prime the engine by first opening the throttle completely and covering the exhaust opening in the tuned pipe with your finger, then push the end of the starter shaft into the shaft coupler on the engine.

WARNING If the engine has been running, the tuned pipe may be hot.

❑ Engage the E - Start Electric Starter by pressing and holding the trigger button until you see fuel just start to enter the carburettor through the fuel line. Once you see fuel begin to enter the carburettor, release the button on the starter so that the engine doesn't flood.

❑ Connect a fully-charged glow starter to the top of the glow plug, making sure that the glow starter is locked firmly onto the top of the glow plug. You don't want it to fall off while you're trying to start the engine.

❑ With the throttle in the idle position, hold onto the model firmly and engage the E - Start Electric Starter by pressing and holding the trigger button until the engine starts. **Do not run the starter for more than 10 seconds at a time.** Once the engine starts, pull the starter shaft out of the shaft coupler on the engine.

WARRANTY INFORMATION

Your E - Start Electric Starter System is warranted against manufacturer defects in materials and workmanship for a period of 60 days from the date of purchase. Warranty service will be provided within 60 days of the date of purchase only if you are able to provide the original or a copy of the original dated sales receipt.